

**REMARKS**

Applicants acknowledge the Examiner's careful consideration of this application and the the detailed Office Action.

Applicants respectfully request reconsideration and withdrawal of all rejections and objections, and a notice of allowance.

Applicants acknowledge their prior election, with traverse, and respectfully submit that all claims can and should be examined in one application consistent with the salutary objectives of MPEP 803. In the alternative, re-joinder is respectfully solicited. Finally, if the Examiner neither favorably reconsiders the requirement for restriction, nor rejoins the previously non-elected claims, and if the elected claims are otherwise allowable, then the non-elected claims may be canceled by an Examiner's amendment.

The amended claims presented above find basis in the original specification, which includes the original claims, and avoid new matter. Amended claim 1 includes language from original claim 5 and 11. Amended claim 5 finds basis in the specification disclosure that the present invention does not require use of a vacuum as material is applied to a support surface. Attention is respectfully directed to the specification at pages 3-4, and to the original claims, such as claim 3. Amended claim 31 finds basis in the specification for reasons stated above. Amended claim 40 finds basis in the specification for the foregoing reasons and, for example, in view of page 7 at paragraphs 0038-0039.

Applicants respectfully traverse the rejection of claims 1-5, 7-15, 20-22, 31-34, 38-39 and 41 under 35 U.S.C. §102(b) over U.S. Patent No. 5,579,998 (Hall et al.); the rejection of claims 1-8, 11, 12, 20-23, 26, 31-33 and 37-41 under 35 U.S.C. §102(b) over U.S. Patent No. 5,413,750 (Kelman); the rejection of claims 1-29 and 31-41 under 35 U.S.C. §103(a) over U.S. Patent No. 6,030,575 (Barron) further in view of the Kelman document (U.S. Patent No. 5,413,750); the rejection of claims 1-8, 11, 12, 20-23, 25-29, 31-33 and 37-41 under 35 U.S.C. §103(a) over U.S. Patent No. 5,045,251 (Johnson) further in view of the Kelman document (U.S. Patent No. 5,413,750); and the rejection of claims 9, 10, 13-19 and 34-36 under 35 U.S.C. §103(a) over U.S. Patent No. 5,045,251 (Johnson) further in view of the

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Kelman document (U.S. Patent No. 5,413,750) and the Barron document (U.S. Patent No. 6,030,575).

The Examiner "bears the initial burden, on review of the prior art . . . , of presenting a *prima facie* case of unpatentability." In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

Section 102(b) entitles a person to a patent unless "the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States." 35 U.S.C. § 102(b). Anticipation under § 102 can *only* arise when a prior art reference discloses each and every claim limitation either expressly or inherently. Any allegation of inherency must be supported by facts demonstrating the purported inherent matter was necessarily, inevitable, and always the outcome because probability, possibility and the like do not satisfy the heavy evidentiary burden required for anticipation.

A rejection cannot be predicated on the mere identification of individual components of claimed limitations. There must be evidence that "a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." In re Rouffet, 149 F.3d 1350, 1357 (Fed. Cir. 1998); see also In re Werner Kotzab, 217 F.3d 1365, 1371 (Fed. Cir. 2000). That is, "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification" Ex parte Metcalf, 67 USPQ2d (BNA) 1633, 1635 (BOPI 2003), quoting in re Fritch, 972 F.2d 1260, 1266 (Fed. Cir. 1992). "[I]t is incumbent upon the examiner to identify some suggestion to combine the references or make the modification." Ex parte Askman, Appeal No. 96-1548 (June 10, 1999) at page 5, quoting In re Mayne, 104 F.3d 1339, 1342 (Fed. Cir. 1997). The factual basis for an alleged suggestion "cannot 'be resolved on subjective belief and unknown authority.'" Ex parte Metcalf, 67 USPQ2d at 1635, quoting In re Lee, 277 F.3d 1338, 1343-44 (Fed. Cir. 2002).

A reference that has no teaching of a claimed element of the invention would not have suggested the claimed invention to a person of only ordinary skill in the art. When an alleged prior art patent, including drawings, is silent on a quantitative relationship, rejections

assuming the existence of any such quantitative relationship are undermined, and subject to being reversed. *See, e.g., Hockerson-Halberstadt Inc. v. Avia Group International Inc.*, 58 USPQ2d (BNA) 1487, 1491 (Fed. Cir. 2000); *Ex parte Brown*, 19 USPQ2d (BNA) 1609, 1612 (BOPI 1990) ("since the prior art is silent as to this feature, we are unable to sustain the rejection ..."); *Ex parte Isaksen* 23 USPQ2d (BNA) 1001, 1006 (BOPI 2001) ("Forbes patent [is] completely silent as to any sharpening effect and do not describe with any specificity what results to magnetic treatment had on the razor blade edge," rejection reversed). This follows from the *In re Antonie*, 195 USPQ (BNA) 6, 8 (CCPA 1977) decision where the court said "The PTO and the minority appear to argue that it would always be *obvious* for one of ordinary skill in the art *to try* varying *every* parameter of a system in order to optimize the effectiveness of the system even if there is no evidence in the record that the prior art recognized that particular parameter affected the result. As we have said many times, *obvious to try* is not the standard of 35 USC 103. In *re Tomlinson*, 53 CCPA 1421, 363 F.2d 928, 150 USPQ 623 (1966). Disregard for the unobviousness of the results of "obvious to try" experiments disregards the "invention as a whole" concept of §103, In *re Dien*, 54 CCPA 1027, 371 F.2d 886, 152 USPQ 550 (1967) and In *re Wiggins*, 55 CCPA 1356, 397 F.2d 356, 158 USPQ 199 (1968), and overemphasis on the routine nature of the data gathering required to arrive at appellant's discovery, after its existence became expected, overlooks the last sentence of §103. In *re Saether*, 492 F.2d 849, 181 USPQ 36 (CCPA 1974)."

The problem addressed by the present method and the manner of its being addressed are neither disclosed nor would they have been suggested to a person of ordinary skill in the art by the cited reference(s). "A prima facie case of obviousness can be rebutted if the applicant ... can show 'that the art in any material respect taught away' from the claimed invention." *In re Geisler*, 116 F.3d 1465, 1469 (Fed. Cir. 1997) (quoting *In re Malagri*, 499 F.2d 1297, 1303 (CCPA 1974)). A reference teaches away when a person of ordinary skill, upon reading the reference, would have been led in a direction divergent from the path that was taken by Applicants.

Here, the Hall et al. document, U.S. Patent No. 5,579,998, does not suggest nor does it describe the present inventions according to claims 1-5, 7-15, 20-22, 31-34, 38-39 and 41. This reference does not disclose nor does it suggest mixing the reinforcing material and the binder in which an emitting stream of reinforcing material and emitting a stream of binder

may be combined (mixing the streams). The Hall et al. document would appear also to mention only pulverulent or fine particulates as a reinforcement, but otherwise appears lacking disclosure suggesting chopped reinforcement alone or even chopped reinforcement that may include particulates. The reference to cork and/or glass microspheres (sometimes obtained from fly ash) at column 5, lines 36-37 would not have suggested 'fibrous reinforcement' as recited in claim 31. This is especially evident when the reference to ablative coatings for aerospace (column 8, lines 32, 43 and 46-48) is considered. Therefore, the Hall et al. reference neither describes nor would it have suggested the inventions of independent claims 1, 31 or 40 plus their dependent claims.

Claims 1-29 and 31-41 define novel and unobvious inventions over the Barron document. The cited Barron document, U.S. Patent No. 6,030,575, requires a foraminous screen (column 3, line 2) and "maintaining the fibers in position on the screen by use of a vacuum means positioned behind the screen" (column 3, lines 25-27). Since claim 1 refers to a solid support surface it is novel over the art that requires a foraminous screen. A solid support surface is the antithesis of what is described and required by this reference. Claim 31 is also novel and would not have been suggested by this reference inasmuch as the claim refers to a solid support surface. Claim 40 is novel and would have been unobvious over this reference inasmuch as the claimed method does not require application of vacuum to a surface during a spraying step.

Claims 1-8, 11, 12, 20-23, 26, 31-33 and 37-41 define novel inventions over the Kelman document. The cited Kelman document, U.S. Patent No. 5,413,750, requires a foraminous screen (Abstract; column 1, lines 18, 40-41, column 2, line 52 etc.) and a suction fan drawing vacuum through the foraminous screen (column 2, lines 57-59) as is illustrated in its Figure 1 and described at column 3, lines 1-27. Since claim 1 refers to a solid support surface it is novel over the art that requires a foraminous screen. A solid support surface is the antithesis of what is described and required by this reference. Also, claim 31 similarly defines over this reference. Claim 40 likewise defines over the reference in that a vacuum is not required.

Claims 1-8, 11, 12, 20-23, 25-29, 31-33 and 37-41 define novel and unobvious inventions over the Johnson document, even when taken with Kelman document. The

Johnson document, U.S. Patent No. 5,045,251, includes reference to a resin transfer molding process, but it too refers to a screen (column 3, lines 40-42) and it teaches that "[t]ypically, vacuum is applied to the back side of the screen to hold the glass onto the screen as it accumulates and also to ensure uniformity of fiber depth in the various areas of the screen" (column 3, lines 44-49). It is not seen where such instruction would have motivated the ordinary person in the art to the inventions of claims 1-8, 11, 12, 20-23, 25-29, 31-33 and 37-41.

The shortcomings of the Johnson document are not overcome by combining it with the Kelman document or with a combination of the Kelman and Barron documents. It is important to appreciate that destructively vivisectioning the prior art to eliminate its essential required elements to reconstruct the present claimed inventions contravenes both the prior art and the statute, 35 U.S.C. §103(a). It would thus be inappropriate to eliminate the foraminous screen and vacuum as taught by the references. In re Hartman, 186 USPQ (BNA) 366 (BOPI 1974). The Board of Appeals explained:

Claims 1 and 5 to 8 stand rejected under 35 U.S.C. 102 as anticipated by Graham et al. We will not sustain this rejection. In our opinion these claims are not fully met by Graham et al. The claims recite the filaments as "partially drawn" before being coated with a plastic filament. Not only does Graham et al. not teach this but, as recognized by the Examiner, Graham et al. teach the use of *undrawn* fibers. The examiner's arguments that appellant's claims are sufficiently broad to encompass essentially no partial drawing, or that a routineer would expect some orientation in the fibers from handling are not deemed to be persuasive. We believe that the routineer would construe "partial drawing" to mean an intentional, positive act over and above any incidental elongation arising out of normal handling of the filaments.

Claims 2, 3 and 9 to 12 stand rejected under 35 U.S.C. 103 as unpatentable over Graham et al. in view of Reynolds. We do not agree with this rejection.

Reynolds teaches neither partial nor complete orientation of filaments in the film matrix. More importantly however, Reynolds cannot properly be combined with Graham et al. relative to the employment of continuous monofilaments, since to do so would destroy that on which the invention of Graham et al. is based, namely, the use of very short fibers. *We will not sustain this rejection.*

In re Hartman, *supra* (emphasis added).

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Accordingly, the combination of the Barron (U.S. Patent No. 6,030,575) and/or Kelman (U.S. Patent No. 5,413,750) documents with the Johnson document would require dismantling the required teachings of at least the former references, and that would be going against their prior art teachings as well contravening the governing statute. The former documents require a combination of a screen and vacuum suction. In practice, vacuum suction calls for a plenum or similar arrangement. At least one of the screen, vacuum and/or plenum are thought to be unnecessary for at least claims 1, 3, 5, 31 and/or 40. For instance, the rejection of claims 1-8, 11, 12, 20-23, 25-29, 31-33 and 37-41 under 35 U.S.C. §103(a) over the Johnson document in view of the Kelman document should be reconsidered, especially in view of the Board's rationale in the Hartman case, because the rejection would require the destruction of the essential elements of the Kelman alleged invention. Furthermore, for instance, the rejection of claims 9, 10, 13-19 and 34-36 under 35 U.S.C. §103(a) over U.S. Patent No. 5,045,251 further in view of the Kelman document and the Barron document should be reconsidered and withdrawn, especially in view of the Board's rationale in the Hartman case, because the rejection would required the destruction of essential attributes of the alleged inventions of Kelman and the Barron documents.

Applicants have endeavored to respond to the matters raised in the Office Action but if a matter has been overlooked, kindly telephone the undersigned so that all matters are resolved, as they should be, to the Examiner's satisfaction.

Applicants respectfully, but earnestly, solicit a notice of allowance.

Respectfully submitted,

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